Sustainable Job Creation in the SA Agricultural Sector

....or where did all the jobs go?

To find a solution we first have to understand the problem and identify the underlying causes
Why am I doing this?

Food Prices Hit Record High, Spurring Worries About Global Unrest

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Published: March 3, 2011

UNITED NATIONS -- Food prices are continuing their global surge, raising the specter of unrest in developing nations.

FAO April 2011
Where did all the jobs go?

“Agriculture shed 112,352 jobs between 1994 and 2004, a fall of 12.1 percent.
In contrast with other high growth countries, the decline in primary sector jobs was not compensated with increased employment in manufacturing, which also declined since 1982.
During the decade between 1994 and 2004, manufacturing jobs fell by 11.7 percent or 165,448 jobs”

This trend has tended to continue. Can it be reversed in the Agricultural Sector?

The answer is - only with determination and cooperation
From Food Exporter to Net Food Importer?

• Why is South Africa now importing so much food or why are we not meeting more of our own needs?
  – Rice – steady increase in imports at expense of maize meal sales
  – Wheat – from virtual self-sufficiency to import dependent
  – Vegetable oil – from adequate local supply to major imports
  – Soyameal – marked increase in imports for animal feeds
  – Poultry – local supply under threat from dumped US/EU products
  – Meat – from exporter to importer
  – Tomatoes – now a major importer of tomato paste
  – Confectionery – increasing imports means loss of local market for sugar and maize (starch and glucose)
  – Pasta – increase in subsidized imports from EU
  – Malted barley – key in beer production, local production minor
  – Starches – reduces use of local maize

• This means we exported the jobs! Why?
  – Apart from rice, all requirements could be produced locally
  – Imported milled Rice no longer subject to import duty or VAT
Agricultural Exports — what happened?

- Maize grits to Middle East — lost to subsidized product from EU
- Defatted maize germ (DFG) to Europe — lost due to escalating local costs and high rail rates (loss of competitiveness)
- Maize oil to Middle and Far East — lost due to no grits and DFG exports
- Maize to Taiwan and Japan (Brewing industry) — loss of competitiveness (low yields, high transport costs, unsustainable domestic levies)
- Canned fruit to EU — market share lost to subsidized production in southern Europe
- While this happened other countries increased their exports

Inefficiencies in the logistic system act as a tax on exports resulting in a lower export price and hence limit the creation of jobs in this activity
Competitive Forces

Chance Events
- War, political/economic crisis, technology shift, oil or commodity shock

Bargaining Power of Suppliers
- Generally no control – oil, fertilizers, chemicals

SA Agriculture

Threat Of New Entrants
- (mainly foreign suppliers with subsidy advantages)

Threat of Substitute Products or Services
- (Rice replaces maize meal)

Bargaining Power of Buyers
- (concentration of power, retailers become importers)

Government Action
- Trade barriers/agreements
- Enabling legislation
- Effective border control
- Agri-subsidies
What has inhibited job creation in Agriculture?

Policies of Governments

• Uncertainty over SA Government policies
  – Land ownership, land tax, water rights, labour regulations, trade agreements, AgriBEE, tariff levels

• Porous SA borders
  – Tariffs evaded (under-invoicing, incorrect description, complexity of tariff codes), phitosanitary regs flouted, SACU, money laundering

• WTO and Agricultural subsidies
  – US and EU have complex systems, biofuels loophole, export subsidies on value added products made from surplus (pasta, chicken portions)
  – Many other countries have schemes to assist agriculture and exports
  – Contesting unfair trade practices difficult and hotly defended

• Reduced investment in Agricultural Research and Training
  – Key problem in SA (reduced investment, closure of Agricultural colleges)

• Neglect of transport infrastructure
What has inhibited job creation in Agriculture?

Local Marketplace

- Multinational Food Processors
  - Rationalized production, import from lowest cost supply *(often a subsidized source)*
- Local Retailers
  - Concentration of buying power, became importers of food products *(confectionery, canned goods, vegetable oils, biscuits, poultry, tomatoes, dairy)*
- Local Manufacturers
  - Sought off-shore investment opportunities
  - Inadequate investment in innovation and capital equipment
  - Imported inputs *(tomato paste, beans, vegetable oils and fats, soya isolates, processed meat)*
What has inhibited job creation in Agriculture?

SA Agricultural Sector

• Reluctance to invest due to uncertainty
  – Land ownership, water rights, moving goalposts

• Inadequate investment in training and skills development

• Decline in investment in agricultural research
  – Sector trust funds inadequate (*loss of levy revenue?*)
  – Failure to recognize the value research has added

• Inadequate Productivity in grains production
  – Despite marked gains not kept pace with global competition

• Escalating input costs
  – Fuel, fertilizers, chemicals, labour, seed

*Figure 3. Fertilizer prices (Nominal index, 2000=100)*

Source: DECPG
What should we be producing more of?  
*(and by so doing create more jobs in agriculture)*

- **Wheat** - SA is now importing increasing volume – why?  
  - Poor cultivars due to inadequate R&D?  
  - Poor cooperation between producers and processors?  
- **Soyabean**s – SA imports large volumes of soyameal for animal feeds  
  - Local yields and quality were poor  
  - Role of foreign agri-subsidies certainly a factor  
- **Sunflower** - growing proportion of vegetable oil requirements now imported – previously done only during serious drought – why?  
- **Barley / Sorghum** – for animal feeds and malting

All better suited to large-scale production
What should we be producing more of?
(and by so doing create more jobs in agriculture)

- **Tomatoes** – SA importing an increasing proportion of its needs
  - Suited to small-scale growing *(see case study in Chile)* but requires hi-tech input and cooperation of processors

- **Poultry** – increasing imports *(more than likely subsidized)*
  - Grow-out can be done by small-scale farmers but requires hi-tech input, processing and distribution facilities

- **Vegetables** – growing demand with need for balanced diet
  - Needs better extension service, research and route to market

- **Pork** – huge potential market in China for quality product
  - Suited to co-op production with hi-tech input and route to market

- **New niche crops** – for fragrances, natural colorants, nutraceuticals
Is there scope for growth in Grain and Poultry Production in SA?

• Without any doubt
• It is economically imperative for South Africa
  – Creation of jobs – especially low-skilled jobs
  – Ensuring food security
  – If we don’t we face political instability and social unrest
  – Imagine food price increases if we go from USD1:ZAR7 to USD1:ZAR10 and continue to increase the level of food imports?
  – What will happen to India’s wheat and rice crops with climate change?
  – How is China going to meet the growing food demands of its population given its limited arable land?
• How do we realize this opportunity?
  – Or do you see it as a threat or impossibility?
My Observations

• Good productivity is key to being globally competitive
  – Jobs created will only be sustainable if globally competitive
  – Productivity is directly linked to training, skills transfer and research
  – Certain types of crop production require economies of scale for success – *but crop yields in SA are not increasing as rapidly as in other regions*
  – *SA has been disinvesting from effective agricultural training, extension services and research*

• Reducing “transaction costs” are also key
  – Role of co-operatives – especially for small-scale farmers
  – Transport costs – getting the product to market including exports
    • *SA transport costs undermine agricultural competitiveness due to low productivity - especially true for rail and harbours*
  – Finance – availability and cost excludes potential players
  – Fertilizer and pesticide costs – excessive compared to other regions?
My Observations

• Agricultural subsidies
  – SA probably least subsidized and with non-existent or ineffectual trade barriers
  – US and EU systems deliberately complex and difficult to challenge
  – But agricultural subsidy or export incentive schemes also exist in Canada, Brazil, China and other countries
  – *How do we protect new agricultural job creation projects until they reach sustainable levels?*

• Mobilize to do what we can do best
  – Some products can only be competitively produced on a large-scale
    • *In Brazil soya, sugar, corn are almost exclusively large-scale*
  – Some products are suited to a combined small-scale and large-scale processing basis – *tomatoes, potatoes, poultry, pork*
  – Water will become a seriously scarce global resource – *use it prudently*

• Crop beneficiation
  – Seldom best done at farm level, requires specialist input
  – *Grass is not always greener on the other side*
  – Requires producer and processor cooperation or alliances – *can this be achieved?*
  – Maize beneficiation?
Maize meal
Maize oil
Maize germ
high-fat
Maize germ
low-fat
Maize grits
Starch
Maize meal
Maize germ
low-fat
Maize germ
high-fat
Maize oil
Animal feeds
Meat, dairy, poultry
Brewing
Dry Milling
Maize
Maize grits
Wet Milling
Maize
Starch
Modified Starches
Conversion
Maltose
Glucose
Beer
Personal care, food products, paper & packaging
Biofuels – *an illusion and distraction*  
*(my personal opinion based on evaluation of local, US and EU documents)*

• Biofuels works in USA due to extensive government support  
  – Without support schemes it would not work  
  – Also depends on high yields and efficient logistics  
  – In EU despite subsidies not very profitable  
  – Use of food crops for biofuels has aggravated food price increase

• Carbon units balance questionable  
  – Early US studies show a negative carbon balance for maize based biofuels  
  – Later studies appear to have manipulated yield data to show a relatively small advantage
Can you see SA Government doing this?

Business Programs Funding
Fiscal Year 2002 In Millions

- $1,152
- $38
- $41
- $4
- $15
- $4

Can you see SA Government doing this?

Farm Bill Proposals

- Expand eligibility for VADG
- Renewable Energy Development Loan and Grant Program
- Value Added Intermediary Relending Program
- Cooperative Stock Purchase Program

Overview of Programs

- Rural Business Enterprise Grant (RBEG)
- Rural Business Opportunity Grant (RBOG)
- Value Added Agricultural Product Market Development Grant (VADG)
- Business and Industry (B&I) Guaranteed Loan Program

... And this is only part of the story!!!
Biofuels illusion

- Extremely questionable for SA
  - Needs average maize yield of over 6.5t per hectare
  - An oil price of over USD125 per barrel excluding all government taxes to break even
  - Distribution of product not determined in earlier evaluations
  - Sasol production cost was USD60 per barrel (*now USD95? – no government support provided*)
- Considering future food scenarios SA cannot afford to use limited arable land needed for food crops to produce biofuels

SA should leverage its world leading gasification technology and vast coal reserves (*rather that export its intellectual property to China, Middle East and Russia*)
What needs to be got right?

- For job creation to be sustainable a number of things have to happen
- Joint effort required by Government, Business (Processors, Retailers, Banks, Input suppliers) and Farmers
- No one group can create sustainable jobs on its own - we will have to work together
- Productivity is key – means greater but effective investment in research, training, skills transfer and better management-labour relations

From the Regoverning Markets Study covering 29 countries in 9 regions
Government’s Role

- Dramatically reduce uncertainty for the sector
  - Seems unlikely, populist policies taking priority over reason
  - Land issue remains emotional, overwhelming failures aside
  - Improve farm security, reduce illegal activity

- Develop effective counters to foreign subsidies
  - This requires a high level of technical expertise and determination and cooperation between government departments

- Ensure effective import controls
  - Need to simplify tariff system and overhaul the SACU agreement
  - Protection for new ventures and unfair competition from imports
  - More effectively counter under-invoicing and “smuggling”
  - Training of specialized Customs officers ad Task Teams
Government’s Role

• **Invest in relevant infrastructure**
  – *Spoornet, Portnet and consider privatization*
  – *Productivity improvement is essential for competition on export markets*

• **Effective training and skills transfer**
  – *Overhaul SETA system, upgrade Extension Services, re-establish Agricultural Colleges all with Private Sector involvement and assistance*

• **Increase investment in Agricultural Research**
  – *Private Sector investment in applied research Rand for Rand*
  – *Evidence that Government’s investment in research pays good dividends*

• **Develop financial support programmes**
  – *Tax relief for job creation or establishment of new ventures including processing using local produced agricultural raw materials*
  – *Need for surplus storage support schemes*
  – *Land Bank and IDC need to be more effective in Agriculture*
Private Sector’s Role

• Not just Government’s responsibility
  – *All will suffer or benefit – social instability is in no-one’s interest and global food shortages are looming*

• Financial Institutions
  – *Need for new mid-range financial instruments*
  – *Provision of additional crop financing methods*

• Input suppliers
  – *Need to understand their responsibility and role or expect control*

• Processors
  – *Invest in local capacity, work with organized agriculture on new ventures, source local supplies rather than imports or face tariffs*
  – *Get involved in rural projects*
  – *Product innovation and improved productivity- compete better against imports*

• Retailers
  – *SA retailers in Zambia show the way?*
Agriculture’s Role

• Focus on global competitiveness
  – Collective investment in research
  – Invest in training, skills transfer, Extension Services
  – More effective application of “scientific” farming
  – Develop better labour relations

• Understand market requirements
  – Determine required quality required (the tough pork story)
  – Become innovative, develop understanding of processor’s needs

• Reduction of “Transaction Costs”
  – A key route to improved competitiveness

• More efficient use of water
  – Reliable water supply a greater constraint then Eskom?
Agricultural Sector Strategic Choices

- Plodding Along
- Cornucopia
- Begging Bowl
- Slow Death

Increased Agri Investment
Decreased Agri Investment

Social Benefit Focus
Competitiveness Focus
Global

- Increased Agri Investment
- Decreased Agri Investment
Tomato Production in SA

- Well suited to small-scale farming
- Tomato production in SA has shown no growth in past 30 years
  - Consumption of tomato based products has increased significantly
  - Solution for Agri-processors – IMPORT tomato paste from China
- Attempts to contract grow
  - Initial success, but problems encountered
  - Access to suitable finance a key problem for small-scale farmers
  - Scale of operation limited
    - No real vision or commitment?
  - Input costs a key inhibitor (*compared to Chile*)
Potential for Job Creation

• Chile by comparison
  – Established one of the largest tomato processing plants in the world
  – 80% of input grown by “peasant farmers”
    • High quality seeds and growth medium ex-USA
    • Seedlings produced to a staggered program to extend season and delivery to processing plant
    • Seedlings and extension service provided by factory
  – Over 70% of production is EXPORTED
    • Customers include Nestle and Unilever